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MEDIUM-TERM PLAN, 1996-2001
(INCLUDING GENERAL CEILING FOR THE BIENNIUM 1996-1997)

Draft medium-term plan, 1996-2001

Proposals of the Director-General

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INTRODUCTION: NEW FORMAT OF THE MEDIUM-TERM PLAN

1. UNIDO has undergone an extensive process of restructuring along the lines described in paragraphs 6-16 below. Accordingly, the medium-term plan as the principal policy framework of UNIDO has been revised in its content and in its structure so as to reflect the reformed priorities, programmes and structures.

2. It is recalled that the current medium-term plan, 1994-1999, approved by the General Conference at its fifth session as contained in document IDB.10/5, follows a structure consisting of five priority problem areas, three elements common to industrial development and six programme instruments of UNIDO as requested in resolution GC.4/Res.25. In the present proposal, this structure has been revised and now comprises the five new development objectives and the related services of UNIDO, three special considerations, six programme instruments (with a revised structure) and three supporting activities. Executive management, general administrative functions, evaluation as well as public information and other recurrent activities are not covered in the present document.

3. The General Conference at its fifth session requested the Director-General in resolution GC.5/Res.1 to ensure the compatibility of the activities within the medium-term plan with the policy framework of UNIDO outlined in document GC.5/23 and endorsed by the Conference in resolution GC.5/Res.18. In response, under the description of the five development objectives, their relationship with the former priority problem areas is clearly indicated (see paras. 49-56 below). Relevant system-wide priority themes such as environment and social development have also been taken into account and integrated into the UNIDO development objectives.

Period covered

4. The period covered by the present draft medium-term plan is six years, from 1996 to 2001. This is in conformity with General Conference decision GC.2/Dec.23, paragraph (b), in which the Director-General is requested to submit to the Board in the first year of each fiscal period, through the Programme and Budget Committee, a draft medium-term plan for the six years that follow the current fiscal period. However, in view of the rapidly changing global economy as well as the changing role and structure of the United Nations system, projecting the socio-economic and industrial prospects until the year 2001 is a very difficult task. This difficulty is intensified by the fact that the document is submitted to the Programme and Budget Committee in the first year of the biennium preceding the first year of the period covered. For this reason, the present draft medium-term plan concentrates on the programme of the first four years, that is, 1996-1999, whereas for the remaining two years the plan should be seen only as indicative. A proposal to reduce the future coverage to a four-year period is contained in the proposed draft decision presented below in chapter III of the present document.

Medium-term plan as the medium-term programme framework

5. The medium-term plan should serve as the principal framework for the biennial programme. Therefore special attention was given to linking the plan more closely to the work programme. Furthermore, in recognition of the medium-term plan document as the main framework for the work programme, it is proposed that the medium-term plan be renamed the "medium-term programme framework". This proposal is also reflected in the text of the proposed draft decision for the consideration of Member States contained in paragraph 191 of the present document.

I. THE OVERALL SETTING

A. The new UNIDO

6. Changes and new developments in international economic relations create new needs and priorities and impose adjustment requirements on all actors involved. Only by a regular reassessment and restructuring can organizations - be they bilateral or multilateral, commercial or humanitarian - retain their efficiency and dynamism and thus ensure their continued relevance amidst a changing environment.

7. To this, UNIDO is no exception. External forces of change and the prevailing spirit of reform throughout the United Nations system, coupled with certain weaknesses in UNIDO, had made a fundamental restructuring and reform essential. With the support of its Member States, the Secretariat set priorities anew and adjusted its structure to current and expected future realities. The relevant proposals submitted by the Director-General in GC.5/23 were adopted by the fifth regular session of the General Conference in December 1993 in its resolution GC.5/Res.18.

External forces of change

8. In the external environment, new driving forces and policy changes are at play in the global economy. These have affected the roles of Governments, enterprises and industrial institutions alike, changing the pattern and conditions of production and the flows of trade, investment and technology. Most developing countries, as well as the countries in transition in Europe and Central Asia, have shifted from import substitution and regulatory industrial policies, supported by strong public ownership and state participation in industry, towards export-oriented, competition-driven policies. The emphasis is on investment promotion, technological advancement, privatization and private sector development as command economies yield to market forces and free enterprise.

9. All this has brought about a marked change in the demand for UNIDO services, that are now being sought by a greater number of countries than ever before. Whereas, in the past, UNIDO was expected to respond to government requests that were largely focused on public sector, inward-looking and planning concerns, demand is now shifting towards development requirements in the private sector. Advisory services are being sought to

help create "enabling environments" in developing countries conducive to private sector development and the mobilization of investment and other resources. This demand is reflected by requests for technical cooperation that countries need as they seek to enhance the competitiveness of their key industrial subsectors.

10. Industrial growth is seen as a prime means of achieving overall socio-economic development. Countries are recognizing the potential of industrial growth to reduce poverty, enhance the status of women and other disadvantaged groups and prevent environmental degradation. Equitable and sustainable development is the ultimate aim of industrial development.

11. Prior to determining its new organizational structure, the UNIDO Secretariat assessed the demand for the Organization's services in all developing regions. While the significant variances in economic and industrial performance between regions were reflected in major differences in demand, none the less certain common features emerged. Given the general acceptance of industry as the primary engine of growth, policy makers across all regions were seen to attach prime importance to creating an environment conducive to sustained industrial development. Hence, major attention was given to enhancing the international competitiveness of the manufacturing industry through furthering the private sector and promoting foreign investment and technology. Human skills and efficient industrial support services were acknowledged to be key factors, while small and medium enterprises played a major role as agents of change in all regions. The assessment also revealed a general awareness of the role played by regional integration and cooperation, as well as growing recognition of the need to ensure the long-term environmental sustainability of industrial development.

12. With the private sector assuming a greater role in industrial development in the developing countries, UNIDO will strengthen its ties and improve communications with private-sector entities to ensure that programmes and projects duly reflect the need to support development of the private sector and will promote international cooperation among private sector entities. It will be pursued in a manner consistent with the role and mandate of UNIDO as an intergovernmental organization and in keeping with the priorities of Member States.

Development objectives

13. On the basis of its broad mandates, in light of the demands of the regions and in an endeavour to make optimal use of its limited resources, UNIDO has identified five development objectives fundamental to its operations. These are:

- Industrial and technological growth and competitiveness;
- Development of human resources for industry;
- Equitable development through industrial development;
- Environmentally sustainable industrial development; and
- International cooperation in industrial investment and technology.

14. These five objectives provide a rationale and conceptual framework for the services of the Organization and set its developmental activities in relation to those of other United Nations organizations and aid agencies. Above all, they establish a close link with the developmental endeavours of the developing countries in the various regions.

15. The comparative advantages that the Organization puts to good effect are its profound knowledge of most subsectors of industry and its broad scope of services related to promoting industrial cooperation, as well as its wealth of information and experience on key industrial development aspects. UNIDO combines these assets at three main levels of intervention - policy, institutions and enterprises - so as to act as:

- A focal point for industrial technology;
- An honest broker for industrial cooperation;
- A centre of excellence on industrial development issues; and
- A global source of industrial information.

16. In accordance with the new objectives and priorities of the Organization, a new organizational structure was put into place as of 1 January 1994, which is outlined in GC.5/23 and further specified in terms of the functions and responsibilities of each organizational unit in Director-General's Bulletin UNIDO/DG/B.175.

B. The United Nations system context

17. Throughout the world, aid agencies as well as the agencies and organizations in the United Nations system are being critically reviewed by their Member States in terms of the direction, efficiency and impact of their programmes. The quality of their projects is being scrutinized; mandates are being reconsidered, while priorities and structures are being reassessed in a number of distinct, yet closely interrelated areas.

18. There is no doubt that within the overall system of international development cooperation, the organs and agencies of the United Nations will continue to play an especially important role as provider of objective advice and untied financial and technical cooperation to Member States. This will also increasingly involve the linking of peace-making and peace-keeping activities with development support, e.g. through immediate post-conflict reconstruction and rehabilitation assistance. However, the need for increased cost efficiency and leaner organizational structures of various agencies as well as for a more rational and transparent division of labour have prompted the initiation of reforms.

19. Within the United Nations system, the focus of medium-term reform efforts is on reforming the system of governance, improving coordination (in particular through an enhanced coordinative function of the Regional Commissions), increasing decentralization and enhancing the effectiveness and efficiency of the system's operational activities. Major changes in the way in which

operational activities are carried out are taking place pursuant to General Assembly resolutions 44/211 and 47/199 as well as based on UNDP Governing Council decisions on successor arrangements. Specifically, this includes:

(a) A major shift towards national execution of UNDP-financed projects, with agencies providing administrative as well as technical support;

(b) Increased emphasis on "upstream" services of agencies, such as sectoral and policy analysis and advice, e.g. in the context of technical support services at the programme level (TSS-1);

(c) A focus on larger interlinked programmes of activities which are more closely integrated with national development programmes (the "programme approach");

(d) A move towards integrated field offices involving a reinforced Resident Coordinator role with all United Nations organizations as members of the country team under the leadership of the Coordinator; and

(e) A strong attempt to introduce an overall framework (United Nations country strategy note) for the activities of the United Nations system at the country level.

20. These overall reform efforts bear manifold and far-reaching implications for UNIDO, which, in the coming years, will have to pursue a two-pronged approach.

21. First, UNIDO needs to ensure that through its industrial development programmes it directly contributes to overall socio-economic development and thus to the attainment of global, system-wide goals. One goal is environmentally sustainable development as conceived by the United Nations Conference on Environment and Development under Agenda 21. Other goals concern issues addressed in system wide programmes such as for population and development, social development and women and development. On these issues global United Nations conferences with active participation by UNIDO are scheduled for 1994-1995 and will require follow-up in the plan period. In all these areas, the instrumental role of the productive sectors in general, and of industry in particular, in achieving overall socio-economic objectives must be emphasized.

22. Secondly, UNIDO will sharpen its own profile as lead specialized agency for industrial development. In response to priority needs of industry, the Organization will focus on elaborating comprehensive programmes in support of industrial development in its Member States, and on enhancing international industrial cooperation. On this basis, the Organization will become an effective player in United Nations country teams and ensure that industry and its priority subsectors are an integral element of overall United Nations country strategies.

23. UNIDO will make every effort to: (a) ensure consistency of approaches throughout the United Nations System in support of industrial development in developing countries; (b) ensure coordination of relevant efforts by various agencies in the system; (c) and promote coordination and pooling of resources from various donors and agencies for co-financing industrial programmes and projects in developing countries. To this end, UNIDO will strengthen its linkages with all United Nations programmes, departments and agencies relevant to industrial development in order to develop joint programmes and intersectoral approaches.

24. In view of the growing importance of regional cooperation, UNIDO will enhance its cooperation with the Regional Commissions. Since the needs and requirements of various regions differ from each other, tailor-made approaches will be developed to establish the most effective strategy and programmes for cooperation with different regional commissions.

25. UNIDO will render full support to implementing the new development paradigm of UNDP, "sustainable human development", for which industrial development must constitute a vital cornerstone and an essential programme focus. In this context, the Organization will insist, however, that a clear division of labour between UNDP as a central funding agency and UNIDO (as well as other specialized agencies) as a substantive implementing agency be maintained.

C. Industrial development prospects and challenges for the period 1996-2001

General trends

26. The pace and economic impact of industrial development in developing countries has varied considerably in terms of both overall economic growth and levels of industrial and technological capabilities. Some countries have registered a remarkable industrial performance and are moving rapidly towards technologically sophisticated industrial structures based on globally-oriented strategies. Most developing countries, however, have lagged behind considerably, particularly with respect to technological developments, competitive skills and industrial capability. The least developed countries have managed to establish only rudimentary and vulnerable industrial structures.

27. Economic prospects for developing countries as a whole seem brighter for the remainder of the 1990s than in the previous decade - which may be seen as a dividend from the far-reaching policy reforms undertaken in most countries. The five-year projection of UNIDO places the GDP growth rate for all developing countries at an annual average of 4.4 per cent (excluding China, which is forecast to grow at 8 per cent per year). The longer-term World Bank projections bear out a 4.7 per cent average annual GDP growth for the 1992-2002 baseline scenario. A regional breakdown yields positive prospects for all major regions though disparities will continue to prevail: sub-Saharan Africa, 3.7 per cent; east Asia, 7.3 per cent; south Asia, 5.3 per cent; Middle East and north Africa, 4.5 per cent; Latin America and the Caribbean, 3.9 per cent; and economies in transition in Europe and central Asia, 2.1 per cent.

28. As former ideological conflicts are fading away, the second half of the 1990s is likely to bring about an increase in financial, technological and marketing cooperation arrangements between enterprises in industrialized and developing countries and among developing countries themselves. The success stories, above

all in South-East Asia yet also in a number of other developing countries, exemplify not only the far-reaching prospects in this regard, but also demonstrate that results can be achieved within a relatively short period, provided the necessary socio-political, economic and technological infrastructure is in place. However, in many developing countries, particularly in Africa, such infrastructure continues to lag behind. Despite liberalization of economic policies and implementation of structural adjustment programmes, the pace of industrialization in African countries has been extremely slow and there has been little inflow of new investments and technology.

29. It is true that the developing countries as a group have regained lost terrain in terms of foreign direct investment (FDI) inflows - in 1992 they received $40 billion which put their share in global FDI flows back at one third and, besides, equalled 70 per cent of official development assistance (ODA) disbursements. However, the degree of country concentration is striking: only 10 countries were able to attract 65 per cent of all FDI flows to developing countries. This is in stark contrast to just 2 per cent going to African developing countries.

30. As one of the key challenges facing many developing countries and as an important area for international support, this will necessitate the development of promotional institutions and mechanisms for enhancing new investments, rapid growth of endogenous technological capacity and international technology transfer. The enabling environment to be provided by Governments must be such that, through skill development, research support and productivity incentives, the operationalization of competitive industrial technologies can be achieved at the enterprise level. Enterprises in developing countries must recognize that they are operating in technologically dynamic fields and that there is constant need for technology upgrading. This, however, requires that developing countries must, at all stages of development, purposefully strengthen their own technological capability. Only with such capability can they choose the right mix of domestic technology development and foreign technology acquisition. Only with the requisite human skills and technological infrastructure and facilities in place can they be active partners in international industrial cooperation and gain access to new technological developments. For the international community as a whole, it is a major task to extend assistance for such capacity-building.

31. There is a clear trend - despite the recent successful conclusion of the Uruguay Round multilateral trade negotiations and the creation of a World Trade Organization - for intra-regional trade and investment links to intensify, as demonstrated, inter alia, by the European Union, the North American Free Trade Agreement and the less formalized Asian Pacific Economic Cooperation. This will have major repercussions on those developing countries outside, or not specifically linked to, such regional integration schemes. For those countries - particularly African countries - renewed efforts to foster subregional integration will be imperative with a view to expanding markets and benefitting from complementarities.

32. In the remaining years of the 1990s, developing countries will face diversified challenges and opportunities in pursing their economic and industrial development. The globalization of industrial production is likely to proceed at rapid pace and innovative responses will be required to counter growing unemployment and associated social unrest in both industrial and developing countries. International cooperation - including the programmes of UNIDO - will have to meet those challenges by adjusting its priorities, programmes and delivery systems and by strengthening the relationship with broader socio-economic goals.

33. Below, the salient features of recent industrial development performance and major prospects are outlined by developing regions.

Africa

34. The 1980s had a negative impact on economic development in Africa. Existing industrial structures were substantially eroded. After a slight improvement towards the end of the 1980s, the following years saw a steady deterioration in the region's economic performance, with average real GDP growth rates decreasing from 4.8 per cent in 1988 to 1.9 per cent in 1992. At the sub-regional level, trends were very uneven. The 11-member Economic Community of Central African States (ECCAS) recorded a negative growth rate of -1.9 per cent during this period; the 16-member Economic Community of West African States (ECOWAS) showed positive, but slowing real growth (average of 5.6 per cent, down to 3.4 per cent in 1992); the five Maghreb countries achieved real growth averaging 2.8 per cent; and the PTA group of countries recorded an average real growth of 2.3 per cent.

35. Thus, after the "lost decade" of the 1980s, Africa still finds itself beset by economic problems. The region has the lowest standard of living in the world and half of its population lives in poverty. The technological gap with other developing regions has widened. As economic performance has deteriorated, the region has found itself increasingly marginalized: Africa's trade represents a mere 2 per cent share in world trade and flows of commercial capital into the region have shown a steady downward trend.

36. Yet, encouraging trends are also emerging. Parallel to macro-economic adjustment programmes, industrial development strategies at the country level are subject to far-reaching changes and attempts to promote subregional integration are being embarked upon with renewed zeal. In the latter context, far-reaching new opportunities, particularly in Southern Africa, are likely to result from the new role played by South Africa following the democratization of that country.

37. In an era of globalization, trade liberalization, deregulation and privatization, many foreign commercial investors and entrepreneurs are exploring new business opportunities in African countries, many of which lack the domestic financial resources and capacities to promote industrial development on a large scale without outside help. UNIDO will clearly have a growing role to play in the region, where impartial advice and technical cooperation are vital for strengthening domestic industries.

Arab region

38. The Arab region has recently recorded a positive growth trend. Growth of GDP for all Arab countries rose from a low level at the beginning of the 1990s to around 4 per cent in 1993. MVA growth significantly surpassed overall economic growth. The overall economic climate in the region is undergoing a remarkable change. While the Gulf Cooperation Council (GCC) is strengthening the internal cooperation among its member States, Saudi Arabia is also gradually building up economic ties with the newly independent central Asian Republics. In North Africa, Morocco, Algeria, Tunisia, Libyan Arab Jamahiriya and Mauritania are seeking to integrate their economies and harmonize their industrial policies in the framework of the Arab Maghreb Union. At the same time, the industrial sector has remained scarcely diversified and is predominantly based on oil and gas in many countries of the region. Efforts are underway, however, to move from basic to downstream industries as well as to promote the development of small and medium enterprises. In this context, experience gained in other developing regions, above all in Asia, may be of particular relevance. The industrial diversification will have a strong impact on future industrial investment and technology transfer and development requirements. Considerable potential exists for the development of downstream mining and metallurgical industries. While production of minerals and metals expanded in the 1970s and 1980s as oil revenues made it possible to invest in the requisite production facilities, many of these strategic and commercially viable reserves are still relatively undeveloped.

39. With the exception of the Arab least developed countries, most of the countries in the region are medium-income economies, with a relatively high level of human resources and a sizeable industrial base already in place. However, tough global competition will impose significant requirements for qualitative improvement on the industrial sector which in turn will necessitate strengthening support institutions and developing consultancy services, particularly knowledge-intensive services in areas such as investment, management, maintenance and post-production services.

40. Following the recent peace accord, a consolidated international support strategy for the Palestinian people is urgently required in which UNIDO will actively participate regarding industrial reconstruction and development efforts.

Asia and the Pacific

41. In Asia and the Pacific, manufacturing industries continue to play the role of the major engine of growth within an overall economic dynamism unparalleled in other developing regions. In the 1980s, when many developing countries in other regions were struggling to maintain their income levels, most Asian and Pacific countries recorded real annual growth rates in the 4 to 9 per cent range (7.8 per cent for East Asia and the Pacific; 5.2 per cent for South Asia). This remarkable performance has continued in the first four years of the current decade. In most countries in the region, industrial structures have become more diversified horizontally and vertically; levels of foreign indebtedness have been kept within manageable limits; inflation rates have remained relatively low; and the degree of integration into the world economy has increased. Overall, the region has consolidated its position as being economically and industrially relatively advanced. UNIDO forecasts clearly indicate that in the 1990s, Asia and the Pacific will continue to outperform all other developing regions - as well as the developed countries - in terms of economic growth. The share of the region in world GDP is expected to rise from 13.8 per cent in 1990 to 16 per cent in 2000.

42. The region's industrial development is propelled by strong export growth, not only in East and South-East Asian countries - including China, but also more recently in South Asia, including Bangladesh, the largest least developed country in the region. In general, Asian countries have also been the "winners" in an intensifying locational competition among developing countries for FDI. Here, however, the contrast between South-East and East Asia as primary targets for FDI flows on the one hand and the South Asian countries on the other has been stark, leading to growing disparities. Furthermore, the evidence of rapidly growing intra-regional trade and investment flows has been largely confined to South-East and East Asia. At the same time, infrastructural bottlenecks are emerging in some countries of this subregion in terms of transport, communications and energy constraints.

43. In most countries in Asia and the Pacific, government has played an important role in terms of industrial policy formulation, implementation and institutional support, particularly to small and medium enterprises. During the past decade, the global trend of the private sector assuming a leading role in industrial development has been particularly pronounced in this region. Most governments have turned to stimulating private initiatives through deregulation, trade liberalization and privatization programmes. The pace and extent of such policies have differed throughout the region, with the newly industrializing economies of East Asia and the ASEAN countries leading reform efforts. The countries of South Asia are following some distance behind, while the socialist economies are just at the beginning of a transition process towards a stronger market emphasis and outward orientation.

Latin America and the Caribbean

44. The severe debt crisis that afflicted many countries in the region in the 1980s has for the most part been overcome - albeit at a high social cost. In many countries in the region, unemployment rates continue to be high, poverty is widespread and internal development disparities are increasing. That notwithstanding, in the 1990s the region is returning to the world stage as a growth area with high potential. Gradually, FDI flows are being redirected to the region and export performance is improving. Some Latin American countries, such as Argentina, Brazil and Mexico, have successfully diversified their range of exports to also include selected high technology products such as biotechnology, computers and peripherals and other electronic products. Countries such as Colombia and Chile have emerged, after the introduction of economic and industrial restructuring reforms, as stronger recipients of

fresh technology and investment flows. However, the situation is rather different for the Central American and Caribbean countries, with the exception of Costa Rica. The majority of those countries still require a profound restructuring programme of the industrial sector to cope with the new conditions arising from free trade movements of the whole region. Colombia and Venezuela in the Group of Three with Mexico, as well as the Argentine Republic and Chile, are seeking membership in NAFTA.

45. Regarding economic reform programmes carried out in most of the Latin American and Caribbean countries, a number of common elements have emerged. These include: the gradual dismantling of regulatory systems for capital, FDI and trade flows as well as price regulations; privatization programmes aimed at reducing the role of the State as an industrial entrepreneur; reduced tariff protection and elimination of non-tariff barriers; and the phasing out of industrial subsidies. These reform programmes will have to be reconciled with social-oriented industrial development efforts, including initiatives to reduce regional disparities which are now on the agenda in many of the region's countries.

Countries in transition

46. In the countries in transition, recent economic developments reflect the break-up of past systems, institutions, modes of production and patterns of economic exchange. Most of these countries pursue transformation processes towards a market-based economic system and increased global integration. Progress along this path has been varied and will continue to determine the economic agenda, at least in the medium-term. Recent growth rates have been generally low, with positive signs, however, in the western part of the region. Following sharp GDP contractions in previous years, 1992 was a turning point for the former Czechoslovakia, Hungary and Poland. The Baltic States, Bulgaria, Romania, the Russian Federation as well as the central Asian Republics are still caught in a downward spiral, the brunt of which is being borne by the industrial sector. Over the period 1989 to 1992, industrial output across the entire region declined by over 40 per cent. A special issue requiring urgent attention is the widespread destruction of industrial production capacities in former Yugoslavia where reconstruction programmes would have to be mounted once a negotiated peace has been reached.

47. While the challenges facing the countries in transition are formidable, their successful transformation and industrial restructuring offer significant potential for industrial cooperation with both the Western industrial nations and the developing countries. There are many opportunities to benefit from the transfer of technology, know-how and increased trade with the countries in transition which offer a wealth of industrial experience and technological skills that can be transmitted to other countries.

48. However, the current inefficient structure of industry and the crisis hitting many of the large industries call for significant endeavours and international support for rehabilitation and restructuring. This will have to include transferring technology and promoting new technology, including "clean" technologies.

II. THE RESPONSE OF UNIDO

A. Compatibility with previous medium-term plan

49. In resolution GC.5/Res.1 the General Conference "requests the Director-General to ensure the compatibility of activities within the medium-term plan with the policy framework of UNIDO outlined in document GC.5/23 and endorsed by the General Conference in resolution GC.5/Res.18". In pursuance of that request, a brief comparative assessment is made below as regards the consistency and connection between the previous and the present medium-term plan. In doing so, special emphasis is given to the relation between the five priority problem areas of the previous medium-term plan and the five development objectives outlined in document GC.5/23. The five "new" objectives fall well within previously established mandates and priorities yet they permit a clearer focus. Overall consistency has thus been maintained. In order to establish a more explicit relationship, a short review of each of the five objectives is given below before elaborating them in greater detail in the following section.

Industrial and technological growth and competitiveness

50. The attainment of industrial and technological growth and competitiveness is a *sine qua non* for developing countries if they are to accelerate their industrial development. A fundamental task for UNIDO is thus to render technical cooperation and other services in this basic field.

51. A direct link exists to the following previous medium-term plan priority problem areas: industrial rehabilitation and modernization; small- and medium-scale industries (with respect to their modern segment which, both through linkages with large-scale manufacturing firms and through innovative forms of flexible specialization and collective efficiency, assumes critical functions for competitive industrial systems); and development and transfer of technology (primarily through the development of domestic technological capabilities as the basis for self-sustained industrial development).

Development of human resources for industry

52. This development objective corresponds directly with the priority problem area "human resource development" in the medium-term plan, 1994-1999.

Equitable development through industrial development

53. This development objective addresses the basic needs of developing countries, in particular the least developed countries, for poverty alleviation and for inducing more equitable development patterns. A direct link to previous medium-term plan priority problem areas exists with small- and medium-scale industries (*inter alia*, as a mechanism to promote rural industrialization).

Environmentally sustainable industrial development

54. This development objective reflects the international community's growing concern about the need to abate and prevent pollution attributable to industry as well as to utilize industrial capabilities to provide solutions for sustainable economic growth. It corresponds to the medium-term plan priority problem area "environment and energy".

International cooperation in industrial investment and technology

55. This development objective is derived from the constitutional mandate of UNIDO to promote industrial cooperation on global, regional and national, as well as on sectoral levels. It corresponds to the former priority problem area "transfer of technology" as well as to the former common element "mobilization of financial resources for industrial development". The latter covered both the mobilization of investment resources for developing countries (which is now dealt with under the present fifth development objective) and the mobilization of financial resources for UNIDO programmes (which now is dealt with separately in paras. 182-186 below). With economic and technical cooperation among developing countries (ECDC/TCDC) being a key dimension of this objective, it is also closely linked with the common element "ECDC and subregional industrial cooperation" of the previous medium-term plan. Seen from the perspective of the previous medium-term plan format, this implies changes as summarized in the table presented below:

56. References contained in the previous medium-term plan to specific programmes and subprogrammes involved in various activities have been discontinued. A large number of programmes under the major programmes General Management, Country Strategy and Programme Development, Mobilization and Management of Financial Resources, Common Programmes, Operational Support and Administration clearly relate to the entire range of activities of the Organization. Furthermore, even under the major programmes concerned with service implementation - primarily Information and Research; Human Resource, Enterprise and Private Sector Development; Industrial Sectors and Environment; and Investment and Technology Promotion - most programmes are involved with activities relating to all development objectives and special considerations, albeit with different priorities and focus. Reference is made to the new terms of reference for organizational units of UNIDO contained in Director-General's Bulletin UNIDO/DG/B.175 of 20 April 1994 in which the responsibilities, functions, interlinkages and interaction of different programmes are indicated. Furthermore, the link between the activities carried out under different programmes and the various development objectives will be specified in the Organization's future biennial work programmes.

B. The five development objectives and related programmes and services

57. Current trends in the global economy towards policy deregulation, private sector development, trade liberalization and regional trading arrangements will offer major opportunities for

Previous medium-term plan	New medium-term plan
Priority problem areas	Development objectives
Human resource development	Retained as separate development objective (development of human resources for industry).
Development and transfer of technology	Addressed under two development objectives (industrial and technological growth and competitiveness; international cooperation in industrial investment and technology).
Industrial rehabilitation and modernization	Addressed under development objective "industrial and technological growth and competitiveness".
Small- and medium-scale industries	Addressed under several development objectives.
Environment and energy	Retained as separate development objective (environmentally sustainable industrial development).
Common elements	
Mobilization of financial resources for industrial development	Regarding resource flows to developing countries: addressed under development objective "international cooperation in industrial investment and technology". Regarding mobilization of financial resources for UNIDO: addressed separately in chapter II, section E.2.
ECDC and subregional industrial cooperation	Addressed under development objective "international in industrial investment and technology".
	Special considerations
Integration of women in industrial development	Retained as special consideration.
	Private sector development (new special consideration).
	Regional priorities (previously addressed under "regional dimension").

industrial and trade development - but also pose severe challenges, especially for developing countries. Significant weaknesses of and constraints to socio-economic development will be revealed which need concerted responses at the global, regional and national levels. In this context, social issues of economic development, environment protection and human development are key issues on the agenda of the United Nations system with a view to achieving a sustainable improvement in people's quality of life. The concerns of developing countries to build up a technological and skill basis and capacity for sustained industrial growth are intimately linked with this agenda.

58. In response to these challenges and within the specific realm of industrial development, UNIDO has singled out five develpment objectives which constitute its framework for contributing to overall cooperation efforts undertaken by the United Nations system as a whole. Two of these objectives are of fundamental importance in guiding the activities of UNIDO towards addressing pressing global issues: First, equitable development which above all means social development in terms of poverty reduction, the balanced creation of productive employment and social integration of disadvantaged groups of people - the three core issues of the World Summit for Social Development. Second, environmentally sutainable development which is centered around clean production, energy conservation, natural resource management, reduction of greenhouse gas emissions, and protection of the ozone layer - which are among the core issues of Agenda 21.

59. A third and fourth objective address the concerns of developing countries regarding industrial and technological growth as well as development of human resources for industry.

60. The fifth objective addresses the need for new and strengthened forms and approaches of international cooperation in the field of industry and for making use of the emerging opportunities for a global partnership in this regard. It thus constitutes both an objective per se and a basis for carrying out a wide range of activities associated with the other four objectives.

61. It is through working towards these objectives that UNIDO will play its role and make its distinct contribution to global concerns as expressed in the United Nations agenda for development.

1. Industrial and technological growth and competitiveness

The issue

62. Industrial and technological growth and competitiveness are key prerequisites for the attainment of overall socio-economic development by the developing countries. Through its impact on employment, income, consumption, export earnings and skill enhancement as well as its linkages to the primary and tertiary sectors, industrial growth remains the central issue for all countries. The build-up of industrial growth capabilities in developing countries on a sustainable basis requires forward-looking policies, capacities for generating and applying new technologies, managerial development, efficient information systems as well as industrial support services. It is through these indigenous capacities and related skills that developing countries can systematically pursue industrial growth and build up their current and future industrial competitiveness or "development strength".

63. In the 1990s, international competition in industry is increasing and is undergoing significant change in terms of its forms, main actors and determinants. In the past, competitiveness was mainly seen as a cost issue at the level of manufacturing enterprises. Analyses of competitiveness tended to focus predominantly on such indicators as labour intensity, wage levels and productivity and had a short to medium time horizon. This narrow perception falls clearly short of explaining the multitude of other factors behind competitiveness in the far more complex world of today. The emergence of new competitors, the application of new technologies in production processes and products, new information technologies and associated organizational changes within and among enterprises, as well as the policy changes in a number of countries (including, inter alia, new health and safety rules and environmental standards), have all contributed to these changes.

64. With the trend towards automation, the direct labour content in manufacturing is declining; hence labour costs alone will be a less decisive factor in determining the competitiveness of industrial activities in the future. The same holds true for traditional raw materials as their share and overall importance in many industrial product lines is decreasing and scarce raw materials are being replaced by cheaper synthetic products in which developing countries no longer enjoy a comparative advantage. In other words, many developing countries are witnessing the increasing erosion of their traditional comparative advantages and the competitiveness of their industries based solely on cheap labour and locally available raw materials.

65. These changes have resulted in the emergence of a new paradigm of competition and competitiveness. International competitiveness in the field of industry is becoming an increasingly complex concept. It covers not only cost-price dimensions but also quality considerations and questions of product design as well as flexible responses through custom-made products, improved marketing and more efficient distribution channels, built-in after-sales services and the establishment of functioning information systems. Besides enterprise-level requirements such as skills, information, technology and management, the concept of competitiveness essentially reflects the systemic interplay of enterprises in production networks and indeed the entire national environment for the production of goods, as well as the existence of an overall enabling environment for the economy, including its ability to attract foreign investment capital.

The services of UNIDO

66. In the plan period, support to the build-up of domestic technological capabilities in various subsectors, including agro-based, chemical, engineering (including electronics) and metallurgical industries, is at the centre of UNIDO's services under this objective. Based on a close monitoring of international technological and economic trends, UNIDO will focus its technical cooperation and advisory services on issues such

as the supply of technological information; new and competitive technological applications in various industrial subsectors; absorption and adaptation to local factor conditions of new technological processes; and the development of endogenous technological capability through applied research at institutional and enterprise levels. Specifically, its services will cover production engineering, process options and related equipment choice as well as product design and development with a view to increasing the cost efficiency of production, improving the quality of manufactured goods and enhancing competitiveness. This will prominently include advice on the sourcing, assessment and transfer of technologies and support to their subsequent adaptation to local needs and capabilities. In the latter area, services related to human resource development for industry will be playing an important integral role. Furthermore, developing countries will be assisted in enhancing the awareness of industrial implications and applications of new, cross-sectoral technologies (such as informatics, new materials, biotechnology and environment- and energy-related technologies) as well as strengthening their capabilities to adapt them according to their specific needs.

67. At the policy and institutional level, UNIDO will provide advice to Governments and other actors on strategies for industrial and technological development, and policies conducive to creating an enabling environment for achieving accelerated industrial growth, with special emphasis on enhanced private sector development. UNIDO will also focus on strengthening and supporting specific institutional mechanisms such as those for investment promotion and providing technical support to local enterprises, besides dedicated centres for industrial development (e.g. science parks and business incubators), industrial associations and chambers of commerce as well as a wide range of industrial support institutions. The latter would cover areas such as industrial technology, research and development, management and marketing, with primary emphasis on enhancing the capability of those institutions to render technical consultancy, advisory and extension services to their industrial members and clients as well as creating links between them.

68. Given the rising importance of the quality dimension in international competition, both in export and domestic markets, UNIDO will further enhance its programme on quality control, standardization and metrology. Specifically, UNIDO will render advice on the industry-specific application of generic ISO 9000 standards that need to be adjusted to the requirements of different manufacturing production processes. With a view to reaching a broad base of recipient enterprises, such services will primarily draw on existing institutions and associations (or focus on institution-building) to ensure maximum multiplier effects. Technical cooperation in quality control, standardization and metrology - the heart of the UNIDO industrial quality programme - will be complemented by two additional elements: promotional activities (such as awareness-building seminars) and research and advisory services on company-level statistical quality control tools.

69. Small and medium enterprises are increasingly recognized as key actors in the industrialization process. To fulfil their role, they need strong linkages among themselves and with larger business partners as well as efficient support systems. Specifically, the networking of small and medium enterprises (SMEs) and large manufacturing firms through production linkages is an indispensable dimension of industrial resilience and competitiveness. In the plan period, UNIDO will further strengthen and integrate its related services in terms of: (a) policy analysis and advisory services concerning approaches to inducing and promoting local sourcing by large industries; (b) assistance to small and medium suppliers to upgrade their technical and commercial skills and their capability to meet quality requirements; (c) support in building up transparent information systems on networking potentials (e.g. through sub-contracting exchanges); and (d) development of networking and linkages between institutions and SMEs in different countries. Furthermore, UNIDO will promote concepts of flexible specialization of clusters of SMEs based on complementarity and cooperation. In general, UNIDO will stress its role as an intermediary among the different parties involved in SME development, particularly with a view to enhancing links between Government and private sector institutions, associations and enterprises. Institutional capabilities in designing and managing SME policies and programmes will be strengthened.

70. Finally, enterprise restructuring services will constitute a central dimension of UNIDO activities under this objective. Enterprise restructuring, in the form of rehabilitation and modernization programmes, will be applied to secure the optimal use of existing industrial capacities through upgrading and transformation, and thus to lay the groundwork for future industrial growth and competitiveness. Specifically, UNIDO will focus on: integrated restructuring assistance that encompasses diagnostic surveys; the identification of diversified market potentials; preparation of feasibility studies for modernization or new investment requirements; managerial, financial and ownership restructuring (including privatization); elaboration of detailed implementation plans and provision of specialized training - and coordinate these activities with measures to be taken at the institutional and policy levels.

71. UNIDO will also render policy advice and promote consultative processes between Governments, industrial entrepreneurs and associations so as to enhance the development of an effective and competitive industrial fabric and a systemic approach towards industrial and technological growth.

2. Development of human resources for industry

The issue

72. Human resource development can be defined as a dynamic process providing and sustaining opportunities for women and men in accordance with their aspirations and talents to acquire knowledge, skills, attitudes and know-how, the ultimate objective being to accelerate industrialization and foster socio-economic development.

73. Developing countries face grave shortcomings in their industrial production structures: financial resources are not fully utilized, the technological gap is widening and technology frequently poorly managed, while industries often are inefficient, non-competitive and unprofitable. These difficulties are compounded by rapid

technological advances, global economic changes, resource shortages and lack of market access. A major task confronting developing countries in this decade is that of building up more effective capacities for human resource development so that they can respond effectively to new industrial challenges.

74. With its broad connotations for the human dimension of development, human resource development thus is of primordial concern in the industrial context. It is an important precondition for, as well as a result of, industrialization. For UNIDO, it relates not only to educational and training systems at the regional, national and enterprise levels, but it is also closely associated with building up capabilities for the development, transfer and absorption of technology and the promotion of industrial restructuring towards skill-intensive activities and industrial services.

75. Central to the discussion of human resource development for industry are the need to create and upgrade continuously the skills, motivation and know-how required by industry and essential to achieving dynamic industrial growth. This is also borne out by the new patterns of industrial growth and competition in the world economy which indicate that:

(a) A high skill level is a key determinant for an economy's competitiveness both in terms of production, development and application of technology, as well as the attraction and full utilization of investment and other resources;

(b) Human resource development is an essential part of a country's industrial structural adjustment process. The capacity of a national economy to carry out efficient and socially acceptable restructuring is largely dependent on the functioning of the system of skill generation and its linkage with both the industrial and the science and technology sectors;

(c) The ability of a country to generate and upgrade industry-related skills is a major instrument in combating unemployment and generating equitable development; and

(d) An economy needs enhanced and focused skill generation in order to seize opportunities in advancing industries and rapidly changing markets, as well as to increase the pace of innovation in production.

The services of UNIDO

76. The services to be provided by UNIDO in the plan period under this objective fall into three distinct yet closely interlinked sets of activities, namely supporting the elaboration and review of strategies, policies and plans for industrial human resource development; strengthening capacities and capabilities for industrial human resource development at the institutional level; and directly carrying out a wide range of training activities, inter alia, at the enterprise level.

77. To exercise a strategy and policy advisory function, UNIDO will undertake research and analysis on the main determinants of changing skill requirements in industry with special emphasis on the impact of new technologies and of new ways of work organization at the enterprise level. Changing relationships between the research and development system on the one hand and industry on the other - e.g. concerning the role of demand-oriented transfer agencies - will receive priority attention. Informed by research and analysis, UNIDO will advise policy makers on industrial human resource development at national and sectoral levels with a view to increasing overall industrial productivity.

78. Complementary to the above, UNIDO will focus on supporting institutions with an industrial human resource development mandate with a view to enhancing their capabilities to provide technical, managerial and entrepreneurial training. In the plan period, that support will increasingly involve industrial associations and chambers of commerce and industry as well as consultancy institutions in view of their strong multiplier effect and direct access to industry, in particular private enterprise. At the same time, emphasis will be given to reviewing and reassessing the activities and curricula of existing public sector training institutions that in many cases need to be adjusted to changed economic environments so as not to lose their responsiveness to the changing technical, organizational and managerial requirements of industry. Another area of concentration will be the networking and/or twinning of training institutions in developed and developing countries as well as among developing countries themselves to facilitate and encourage the exchange of staff, information and curricula.

79. In terms of direct training activities, UNIDO will provide advice and assistance in productivity enhancement by upgrading technical and managerial skills essential for mastering and adapting industrial technologies, with emphasis on training industrial consultants and personnel concerned with providing industrial services. To this end, preparation of training materials and manuals will be intensified with priority subjects being: standardization, quality control and metrology; repair and maintenance; rehabilitation; energy efficiency; industrial safety; and environmental issues, including environmental impact assessment in industry. A subject of special significance will be entrepreneurship development. In general, as in the past, various training modalities such as on-the-job training, in-plant workshops, individual fellowships and group training programmes, will be applied as required and appropriate.

80. Given the importance of human resource development for each technical cooperation project, continued efforts will be made to extend the network of institutions prepared to offer training to UNIDO fellows from developing countries and make greater use of "centres of excellence" in developing countries. New training techniques and methodologies will be explored; training will be undertaken for selected target groups that are in a position to multiply the impact of UNIDO training activities (i.e. training of trainers).

3. Equitable development through industrial development

The issue

81. In recent years, most developing regions have recorded positive economic growth which, in the majority of countries, has exceeded population growth rates, thus resulting in absolute increases

in the level of economic welfare as measured by per capita income. It is equally true, however, that the benefits of economic growth have been distributed very unevenly both between and within countries. Income disparities have widened in many economies as has the number of people in absolute poverty.

82. Quantitative estimates for all developing countries suggest that the aggregate number of people living below the poverty line slightly increased during the period 1985 to 1990 to reach 1.1 billion. East Asia and the Pacific was the only developing region to reduce the number of poor whereas in all other developing regions a rising trend could be observed, most pronounced in the case of South Asia and sub-Saharan Africa. At the beginning of the 1990s, the latter region alone accounted for 50 per cent of the world's poor.

83. The eradication of poverty has thus been accorded highest priority in the International Development Strategy of the fourth United Nations Development Decade. Accordingly, one of the primary aims of industrial development must be to alleviate poverty. It is generally recognized that the gradual transformation of agrarian societies into industrial economies and the resulting productivity improvements are important mechanisms to combat poverty. While sustained industrial development itself contributes to creating new employment opportunities, there are specific issues that need to be addressed with a view to optimizing the distributional and poverty-reducing impact of industrialization. As experience in the developing regions and countries amply demonstrates, the relationship between industrial development, income distribution, incidence of poverty and fulfilment of basic needs is not predetermined by economic laws, but varies significantly depending on the type of industrialization strategies and policies pursued.

84. It is also now widely recognized that efforts to alleviate poverty are among the most productive investments with rates of return often well exceeding those in physical investment. They also reduce poverty-driven environmental damage as agglomerations of impoverished persons often exert debilitating pressures on scarce natural resources and fragile ecosystems.

85. The issue of growing poverty and the need to promote active participation in socio-economic development of all segments of the population and all regions within countries requires the priority attention of the international community. UNIDO - within its domain of industrial development - will ensure that human development be made a cornerstone of its efforts to promote socially sustainable patterns of industrialization. This requires that particular attention be paid to the creation of economic opportunities for the disadvantaged and poor segments of the population through the expansion of both employment and entrepreneurial opportunities so as to enable them to enter the mainstream of economic development.

The services of UNIDO

86. In the plan period, UNIDO will contribute to the creation of more equitable economic opportunities and to the alleviation of poverty by focusing more on economically disadvantaged regions within countries and by developing the full productive potential of rural areas and addressing the issue of urban poverty. At the same time, the equitable development objective implies a special emphasis on the least developed countries which to date have only marginally shared the benefits of industrial progress thus constituting the weakest segment of the international community.

87. Programmes aimed at a more equitable regional distribution of industrial development are expected to receive priority in an increasing number of developing countries and, accordingly, will be of major significance in guiding the services of UNIDO towards a stronger regional dispersal of industrial development. In this context, it is essential that successful regional development be initiated and carried out by the regional actors themselves. UNIDO will support this process by: (a) providing assessed information on efficient mechanisms of regional development, such as the various manifestations of the industrial district concept and their applicability in different development contexts; and (b) providing advisory and promotional services to regional (provincial) industrial institutions and policy makers in areas such as regional development concepts and plans, industrial zoning approaches, targeted investment promotion as well as environmental impact assessment.

88. UNIDO fully recognizes the immense potential contribution of small and medium enterprises for balancing social inequalities, reducing poverty, integrating the rural and urban poor into the productive sectors, providing products and services required by the rural poor, creating demand for produce supplied by small-scale farmers and repositioning women and other disadvantaged groups. Furthermore, they are an important vehicle for stimulating productive activities in the context of post-conflict reconstruction and development efforts. The promotion of small and medium enterprises, particularly in rural areas, will thus be pursued vigorously, with special emphasis on natural resource processing and the manufacture of simple consumer goods as a means to create non-farm employment.

89. In this regard, priority services of UNIDO in the plan period are:

(a) Assistance in entrepreneurship development programmes for industry through training in basic managerial and technical skills, with special emphasis on women;

(b) Provision of information, advice and operational support on the establishment of common service facilities, business incubator schemes and other institutional approaches for small-scale industry and/or entrepreneurship development;

(c) Encouragement of subcontracting relationships between rural small industrial enterprises and larger manufacturers;

(d) Information and advice on technology upgrading options with emphasis on the efficient blending of traditional and modern technologies;

(e) Stimulation of self-organization for small industrial enterprises, for example in the form of subsectoral associations based on clusters of informal sector producers;

(f) Promotion of linkages between small-scale industries and the service and agriculture sectors;

(g) Review of the functions and impact of national small industry development agencies and provincial and municipal authorities and elaboration of programmes to enhance their effectiveness.

90. In terms of subsectoral priorities, the equitable development objective calls for priority attention to be given by UNIDO to agro-related industries and thus the strengthening of linkages between small-scale agriculture and manufacturing with a view to raising rural productivity, employment and incomes, particularly among the poor. The processing of food - largely taking place in small industries and in a regionally dispersed manner - sets a critical dimension in poverty alleviation strategies. In the plan period, UNIDO programmes will emphasize: the selection, adaptation and diffusion of processing technology, including extension services for cottage and small industries; the modernization/rehabilitation of ailing food-processing plants; quality control throughout the processing chain; introduction of health and environmental standards for food products; and packaging for preserving quality and facilitating transport and storage.

4. Environmentally sustainable industrial development

The issue

91. With industry being at the centre of the process of achieving sustainable development, the growing importance of environmental issues necessitates their effective integration into industrial activities at both the policy and enterprise levels to achieve environmentally sustainable industrial development.

92. As new investments are made in various industrial subsectors, opportunities arise for incorporating higher resource efficiency and lower pollution intensity and the use of cleaner and more environmentally suitable technology and related know-how and services. Transfer of technology, human resource development and local capacity-building are thus key instruments for technology choice and for harmonizing environmental needs with those of industrial development.

93. In June 1992, the United Nations Conference on Environment and Development (UNCED) adopted the Rio Declaration on Environment and Development and Agenda 21, which has put the global community firmly on the road to sustainable development. Progress down that road will depend on adherence to the principles enunciated in the Rio Declaration and the achievement of Agenda 21, which highlights the fact that sustainability requires the addressing of environmental issues as an integral part of the development process.

94. At its eleventh session, the Industrial Development Board in decision IDB.11/Dec.18 requested the Director-General to support the implementation of Agenda 21 and singled out the following priority areas: integrating environment and development in decision making; protecting the atmosphere; environmentally sound management of biotechnology; strengthening the role of business and industry; transfer of environmentally sound technology; and chemical safety. In that decision the Director-General was also requested to engage the Organization in global efforts to protect the ozone layer in accordance with the Montreal Protocol.

95. UNIDO is actively involved in the environmental initiatives of the United Nations system and plays a leading role in their industry-specific programmes. Along with UNDP, the United Nations Environment Programme (UNEP) and the World Bank, the Organization is one of the four implementing agencies of the Multilateral Fund for the Implementation of the Montreal Protocol. It is also a member of the Inter-agency Committee on Sustainable Development and, under Agenda 21, has been designated as the United Nations system task manager for environmentally sound management of biotechnology. More recently, along with FAO and OECD, UNIDO was designated as a partner in the Inter-regional Programme for Chemical Safety which hitherto had UNEP, ILO and WHO as its members.

96. Alleviating environmental burdens resulting from industrial development is often carried out through a highly regulated end-of-pipe pollution control approach. This requires complex legislation, strong enforcement capabilities and the allocation of sizeable resources for environmental control - conditions that most developing countries will find difficult to meet. On the other hand, there is growing evidence that the active promotion of cleaner production concepts, i.e. combating pollution at source, represents the least costly option to society and a major challenge for industry in the 1990s.

The services of UNIDO

97. In the plan period, the services of UNIDO will be centered around the concept of cleaner production, i.e. on eco-efficient, energy-efficient and waste-minimizing processes. In this, the choice and transfer of clean technologies is one essential element that will be complemented by process optimization based on environmental management audits. UNIDO will support country endeavours through policy advice (e.g. on appropriate incentives structures), information on availability and choice of clean technology in various industrial sectors, promotional programmes as well as environment and energy audits. In selected countries in all developing regions, services will be institutionally consolidated in the framework of national cleaner production centres. Special emphasis will be given to the needs of SME in terms of environmental awareness, process improvements, and waste treatment and disposal with particular focus on economic solutions to environmental problems of clusters of SMEs.

98. Another priority of UNIDO will be to assist countries in the implementation of national Agenda 21 programmes. In this context, the emphasis will be on identifying strategic projects - e.g. in energy conservation or pollution prevention - in which UNIDO can provide a holistic response addressing environmental and industrial concerns in an integrated manner.

99. UNIDO will continue to address industry-related environmental issues of biodiversity and biotechnology. In the former field, countries will be supported in the preservation of biodiversity within programmes for the rational cultivation and commercial valorization of plant species, e.g. through plant-based medicines and

other products. Regarding biotechnology, UNIDO will promote environmentally sound industrial applications and strengthen the institutional base by which developing countries can participate in related research and development.

100. With respect to international agreements, response to the Montreal Protocol will receive high attention. UNIDO will draw on its comparative advantage and work primarily at the plant level - particularly in the refrigeration, foams and solvents sectors - with a view to facilitating the phasing out and substitution of ozone-depleting substances.

101. In the context of the International Conference on Chemical Safety, UNIDO will concentrate in the plan period on elaborating guidelines on safe handling and disposal of toxic chemicals; supporting chemical industries in applying safer technologies and processes; promoting product substitutions (using natural or non-toxic substances) in agro-chemicals; and generally promoting the exchange of experience between developed and developing countries in the management and handling of toxic chemicals.

102. Under the United Nations Framework Convention on Climate Change, the promotion of energy efficiency in industrial processes will take on special significance. Advisory services and support related to reducing the environmental impact of energy-generating systems, promoting energy conservation and new and renewable sources of energy - to be seen in the context of the emphasis on greenhouse gas issues under the Global Environmental Facility - will also be strengthened. Finally, the UNIDO initiative towards industrial applications of safer energy (already begun at the National Centre for Applied Solar Energy in Australia) will be further pursued in the plan period in terms of establishing and networking further such centres.

5. International cooperation in industrial investment and technology

The issue

103. With markets being liberalized and economies deregulated, international industrial cooperation is assuming increasing significance for all actors in the global industrial development process. The objective of international cooperation in industrial investment and technology is thus directly related to the central coordinating role that UNIDO plays in the common system in the field of industrial development. Generally, international industrial cooperation involves a broad range of dimensions that encompass cross-border investment flows, technology transfer, international subcontracting, licensing, research consortia, strategic company alliances and many others. The role and responsibility of UNIDO is to lay the foundations for enhanced international cooperation in the field of industry.

104. The active promotion of FDI by developing countries reflects the fact that such investment is seen as an essential tool for accelerating the national development process by increasing and strengthening capital accumulation, technology transfer and local skills as well as leading to new employment opportunities and facilitating access to foreign markets. Many developing countries are in the process of undertaking major policy reforms that include more liberal investment codes, streamlined investment procedures and rationalized investment incentives.

105. It is increasingly recognized that FDI and technology transfer are closely intertwined and their effective absorption depends on similar preconditions. FDI and technology inflows are not only to be seen in terms of individual contracts but also in terms of the creation of a national capability to access such inflows and utilize them effectively so as to secure a return for all parties involved. The establishment of a conducive investment climate, the generation of matching domestic investments and the creation of an adequate infrastructure for the utilization of technology in industry are to be seen as an integral part of the same process.

106. In today's changing industrial landscape, the role of UNIDO is increasingly focused on the creation of global partnerships so as to support collaborative efforts between countries with complementary interests, experience and/or resources. Industrial and industry-related institutions, increasingly also from the private sector, act as efficient vehicles to foster such partnerships that often take place in specific subsectoral contexts.

107. The mechanism of ECDC/TCDC has thereby been the subject of increasing attention. It is now recognized that ECDC/TCDC works best on the basis of initiatives taken by developing countries and their enterprises themselves, with the needs and capabilities of partners being clearly identified. In this context, a significant opportunity is offered by the increasingly important role that regional and subregional groupings of developing countries will assume in the 1990s. External assistance in the field of industry could catalyse the opportunities offered by these groupings, enabling them to benefit from each others' experience and to avail themselves of the potential economies of scale and complementarities of production promised by these groupings.

The services of UNIDO

108. FDI is an essential dimension of international industrial cooperation and UNIDO will continue to offer an integrated investment promotion programme to support this process. The main components of this programme comprise: monitoring and assessment of pertinent trends in international FDI flows; preparing country-specific investment guides on relevant legislation, infrastructure, procedures, incentives, etc.; active support in identifying, preparing, appraising and promoting investment projects so as to create a viable and bankable portfolio for subsequent promotion; building up and strengthening of national investment promotion agencies and advising Governments on suitable policies; organizing investment forums and "invesmarts" (as a mechanism to bring together local project sponsors and foreign partners); and following up and facilitating investment and business agreements, inter alia, through feasibility studies, in the framework of a project completion facility. UNIDO's global system of World Investment Network Services (WINS) will be the key institutional mechanism for investment promotion and its further expansion through additional Investment Promotion Service (IPS) offices is foreseen in the plan period.

109. UNIDO will focus its investment promotion services primarily on medium-sized investors. Not only is there ample evidence that these are gaining in relative importance, but they are also most in need of support services given their limited expertise on foreign markets and their generally higher risk-aversion compared with large transnational corporations. It is also medium-sized investors who attach particular value to the neutrality of UNIDO as an impartial adviser and intermediary. In addition, the successful approach of promoting investment in specific subsectors as well as in particular regions within a country - with a focus, where feasible, on less developed regions - will be continued and broadened in the plan period. Special emphasis will be given to investment-related environmental issues.

110. In the field of international cooperation in technology transfer, UNIDO will assign priority to supporting the build-up and operation of relevant information capacities. This involves the provision of information itself, mainly through the Industrial and Technological Information Bank (INTIB) and the Technological Information Exchange System (TIES) (see para. 168 below), the setting up/upgrading of national technology information mechanisms and their link with UNIDO international networks. Furthermore, international technology transfer trends will be monitored and studied with special emphasis on innovative forms such as build-operate-transfer arrangements and strategic alliances, and developing countries will be supported in their beneficial application. In this context, activities in the plan period will especially support the strengthening of local institutional capacity to deliver consultancy and advisory services as well as training programmes in the area of technology choice, evaluation, acquisition and negotiation. Governments will be advised in implementing appropriate legal and institutional measures to facilitate technology flows and specific programmes such as "techmarts" will be applied for their promotion. Also, the need will be addressed to revitalize existing technology institutions in view of the changed industrial environment.

111. While UNIDO is one of several institutions promoting investment in developing countries, it is the only one with a sound background in industrial development and technology transfer. UNIDO will thus concentrate on linking investment promotion with technology upgrading and the enhancement of technological capabilities through promoting integrated investment and technology policies. Based on the specific conditions prevailing in different countries, the Organization will design in the plan period integrated packages of services to be implemented within the framework of a partnership initiative in close cooperation with the Government, industrial institutions and enterprises.

112. Specifically, international cooperation will be promoted through international and regional centres and networking arrangements under the aegis of such bodies as the International Centre for Genetic Engineering and Biotechnology (ICGEB) and the International Centre for Science and High Technology (ICS) with particular emphasis on long-term capability building in new generic and cross-sectoral technologies.

113. Also, the conclusion of cooperation agreements between industry-related institutions and industrial associations in various Member States will be promoted in the plan period with a view to establishing twinning arrangements and multilateral networks. These could serve as umbrellas for promoting innovative schemes of region-to-region cooperation encompassing a broad range of investment and technology cooperation at the policy, institutional and enterprise levels. Pilot schemes of such region-to-region cooperation will be launched in the plan period.

114. While the promotion of ECDC/TCDC is specifically linked to the international industrial cooperation objective, it is obviously not confined to investment and technology issues and will be given particular attention within all relevant UNIDO programmes. This comprises, inter alia: the strengthening of the institutional infrastructure for ECDC/TCDC activities at all levels; the implementation of suitable mechanisms such as centres of training and technological excellence, networks and workshops; the consideration of ECDC/TCDC dimensions in the design of UNIDO services; and the increasing use of experts, services and equipment from developing countries in UNIDO technical cooperation projects. Specifically, in the plan period, the mechanisms used for monitoring and reporting on ECDC/TCDC activities will be further improved. In response to General Conference resolution GC.5/Res.10, UNIDO will address ECDC/TCDC primarily in regional and subregional contexts and seek close cooperation with existing regional intergovernmental organizations. The focus will be on identifying the preconditions for successful industrial cooperation schemes between developing countries as well as analysing their replicability. UNIDO will provide a platform for exchange of experience in this regard between subregional groupings within and between different regions.

C. Special considerations

1. Integration of women in industrial development

The issue

115. Any policies and measures addressing the development of the manufacturing sector must take into account the crucial role that female industrial labour and entrepreneurship assume both for economic and industrial progress and for the achievement of social development objectives. There is every evidence that the participation of women in the formal industrial sector has resulted in attaining high levels of indicators of social and human development.

116. Despite the major contribution that women have made to manufacturing, their participation has taken place on unequal terms and has been characterized by patterns of "vertical" and "horizontal" segmentation: women have generally been confined to a narrow range of manufacturing branches and are over-proportionately concentrated in low-skill production jobs at the lower end of the occupational hierarchy.

117. This pattern of female participation in the economy and manufacturing is also a result of socio-cultural factors that influence women's status in society and the economy at large: they demonstrate gender-specific constraints. The overall objective for the plan period is to enhance the contribution of women to the industrialization

process of developing countries, including to enable them to participate on an equal basis in industrial decision making and the benefits of development. The thrust of the programme is directed towards assisting women to meet the challenges of industrial restructuring, technological change and economic reforms that many countries are undergoing.

The services of UNIDO

118. The approach adopted within UNIDO and by the United Nations system as a whole to promoting the integration of women in development has been termed "mainstreaming". The focus will be on acknowledging women as an integral part of the target group of UNIDO activities allowing them to benefit on an equal basis. However, women-specific programmes and services will remain all the more necessary in order to address specific constraints that impede women from participating in "mainstream" development.

119. In the plan period, the services of UNIDO will focus on providing policy advice and specific recommendations to Governments with a view to creating a policy environment conducive to the participation of women in industry by removing policy, legal and institutional barriers thereto. At the same time, recommendations will be provided to industry and industrial institutions encouraging them to pay more attention to the potential of women in industrial development, while advice will be given on the improvement and diversification of employment opportunities.

120. To that end, special efforts will be made by all relevant units of UNIDO to obtain and disseminate gender-disaggregated data. Indicators highlighting gender relationships will be developed for the collection of such data, particularly on industrial employment by skill level and occupational group. The findings and recommendations of the ongoing regional typology studies on the participation patterns of women in manufacturing will provide an important source in this respect and will be used in the operational activities of UNIDO.

121. Emphasis will be placed on the consideration of gender-related issues in the management of UNIDO services from the screening stage through evaluation. Furthermore, based on an assessment of industrial subsectors of specific relevance to women, their role will be addressed specifically in activities related to human resource development, agro-industries, small-scale industry promotion, energy and environment programmes. It will also be addressed in relation to the development and transfer of appropriate technology, including new and high technologies.

122. In the plan period, UNIDO studies and research activities will devote attention to the role of women within the countries' human resource base and monitor the impact on women of new technologies, industrial restructuring and resultant changes in skill requirements. For instance, human resource planning based on the studies carried out on emerging employment trends and technology development will facilitate the design of educational and training programmes and other types of technical cooperation activities.

123. UNIDO will also further develop and implement its thematic programme on the promotion of entrepreneurship of women in subsectors where they are strongly represented. In the context of UNIDO activities, issues related to health, safety and working conditions of women workers will be taken into consideration, while labour- and energy-saving and clean technologies that increase women's productivity and income will be developed and disseminated.

124. Close coordination within the United Nations system and at the national and international levels on the issue of women in industry will be maintained throughout the plan period, particularly through follow-up to the Fourth World Conference on Women to be held at Beijing, China, in 1995 and the platform for action that is expected to emanate from that Conference.

125. Steps will be taken to further increase the awareness of the staff of UNIDO and cooperating institutions in developing countries of the participation of women in industry and the constraints women face as well as to upgrade the ability of those designing and implementing services to adequately address the issue of women in industry.

2. Private sector development

The issue

126. In recent years, there has been a powerful trend on the global scene for the private sector in general and private industry in particular to assume a growing, and indeed leading, role in economic and industrial development. Many Governments - disenchanted with the limited growth dynamics generated by public sector-led industrial development - have turned to stimulating private initiative through far-reaching deregulation programmes. In industrial restructuring efforts, increased reliance has been placed on market forces within an environment of stronger competition in final product markets, labour markets and financial markets. As part of this overall process, import protection has generally declined and many restrictions on FDI have been lifted.

127. Within this overall context, the privatization of public enterprises has received growing attention particularly since the mid-1980s. The need for such a reorientation stemmed from a pervasive dissatisfaction with the performance of public enterprises, which in the early 1980s were estimated to account for over a quarter of gross fixed capital formation in all developing countries. Primarily driven by the need to lessen the fiscal burden that inefficient and loss-generating public enterprises had placed on state budgets, a great number of developing countries have embarked upon privatization programmes and policies albeit differing in scope, pace, methods and results.

128. However, the sometimes ambitious privatization programmes have materialized to a limited extent only. Furthermore, transfer of ownership per se does not guarantee increased efficiency or competitiveness. To reach its objectives, privatization has to go hand in hand with a strengthening of market forces through carefully designed deregulation and liberalization moves as

well as with enterprise restructuring and new investments.

The services of UNIDO

129. The lead role played by private industry in most developing countries and the transition to such structures in others bear manifold implications for UNIDO. It is clear that UNIDO services must be geared also to private industry unless the Organization is to lose its relevance. UNIDO activities in support of private industry cut across most services rendered under the various development objectives, more obvious in some cases (such as investment promotion), less so in others. The great majority of UNIDO services either directly or indirectly benefit the private sector in terms of improving the overall business environment, initiating industrial policy dialogues, strengthening support institutions, providing information and research inputs and extending technical and managerial training. Also, in implementing projects, some 50 per cent of UNIDO experts are drawn from the private sector and the majority of contracts awarded for the purchase of equipment are with private sector companies, increasingly from developing countries.

130. In the plan period, UNIDO will continue to provide analytical inputs and policy advisory services to Governments that have embarked upon strategies to promote private industry. Such services will involve both general advice on conducive industrial policies and institutional frameworks as well as specific support to privatization programmes. In this context, UNIDO will draw on its strong sectoral expertise and elaborate private sector promotion strategies also for specific industrial subsectors.

131. In general, it is expected that private industry will play an increasing role in the plan period as both project counterpart and beneficiary. With a view to inducing multiplier effects, this presupposes the existence of effective private industry organization and representation. Particularly in many least developed countries where such institutions are often lacking or malfunctioning, industrial associations such as chambers of commerce and industry will be strengthened by UNIDO through expert advice as well as through the promotion of relevant international partnerships. Efficient industry associations will be able, inter alia, to perform the following functions: (a) to deliver services to member companies; (b) to act as representatives of private industry in policy dialogues and negotiations with the Government; and (c) to function as counterpart for technical cooperation and other promotional programmes. In a way, therefore, many countries face the challenge of having first to create the institutional conditions under which services can subsequently be delivered to private industry. This is a major task for UNIDO support in the plan period.

3. Regional priorities

The issue

132. While being an international organization with a global mandate, UNIDO must be prepared to accommodate and respond to the great regional diversity of resource endowments, economic conditions, levels of development, and industrial and technological skills and capabilities. The constraints of and prospects for industrial development vary strongly from region to region, which is reflected in regionally diversified demands for UNIDO services. The main emerging trends of industrial development in each region are outlined above in paragraphs 26 to 48.

133. In accordance with General Conference resolution GC.5/Res.20 (Yaoundé Declaration), UNIDO gives special attention to the industrialization of the least developed countries which face particular constraints in their resources and infrastructure. High priority is also accorded to the industrialization of Africa and to the realization of the objectives of the Second Industrial Development Decade for Africa (IDDA).

The services of UNIDO

134. The least developed countries (LDCs), by definition, are far behind the rest of the developing world in terms of economic and industrial development. Unless strong remedial action is taken by the LDCs themselves and through international support, the development gap will continue to widen. Typically, LDCs are characterized by relatively poor or underutilized natural resource endowments, small domestic markets, rudimentary and undiversified industrial structures, low levels of skill development, high import dependence and insignificant manufactured export capabilities. Many LDCs are now implementing structural reforms aimed at reducing the size of the public sector, deregulating the economy and promoting private industries.

135. In the plan period, UNIDO will respond to the conclusions reached at the Second Ministerial Symposium on the Industrialization of the Least Developed Countries and address the following needs on a priority basis: enhancing industrial competitiveness as a precondition for increased world market integration; promoting small and medium enterprises and, in this context, promoting entrepreneurship with special emphasis on women entrepreneurs; strengthening national capacities in project identification, formulation, implementation and monitoring; advising on industrial policies conducive to private sector development; and building national capacities, particularly in industrial information, human resource and technological developments. In all these areas, two dimensions of paramount importance will be incorporated: first, the cooperation of UNIDO with development finance institutions at national, regional and international levels; and second, the encouragement of subregional and regional cooperation among LDCs as well as between LDCs and other developing countries.

136. In compliance with the Yaoundé Declaration as well as with the objectives of the Second IDDA, UNIDO will continue to assign high priority to assisting African countries and subregional and regional organizations. In this context, further harmonization of activities of the Second IDDA and the second United Nations Transport and Communications Decade in Africa will be actively sought in consultation with the Organization of African Unity, the African Development Bank and other relevant organizations. In line with the relevant resolutions taken at the eleventh meeting of the Conference of African Ministers of Industry as well as General Conference resolution GC.5/Res.12, the activities of UNIDO under the Second IDDA, comprising 50 national and

four subregional programmes, will focus on: formulating industrial policies with a view to creating an enabling environment for increased industrial investment and private sector participation; stronger involvement of the private industrial sector in implementing the programmes of the Second IDDA; expansion of investment promotion; entrepreneurial training and development; dissemination of industrial and business information; promotion of linkages between small and medium industries and large industries as well as between agriculture and manufacturing through support to agro-related and agro-processing industries; assistance in the implementation of national Agenda 21 programmes and in reconciling environmental needs with industrial priorities; and the development and strengthening of sustainable capabilities of industrial support institutions in areas such as industrial technology, research and development, consultancy, human resource development and industrial associations. In addition, regional and subregional industrial cooperation will be further strengthened, in particular by elaborating market integration programmes in priority subsectors in the context of existing cooperation arrangements among African countries.

137. The Special Programme for Industrial Development in the Arab Countries, in response to General Conference resolution GC.5/Res.13, will orient its activities in the plan period towards the following priority areas: human resource development; development of national and regional technological capacities and upgrading industrial competitiveness; standardization and quality control; industrial management information; food security through the development of agro-industries; promotion of the private sector, industrial rehabilitation and investment activities; and energy conservation and environment protection. New activities in the plan period will be jointly planned with the relevant specialized Arab organizations and the LDCs in the region will be given particular attention. UNIDO further intends to elaborate a comprehensive industrial support programme for the Palestinian people, focusing primarily on employment generation and the promotion of small and medium enterprises through private sector initiatives.

138. The Special Programme for the Industrial Development of Asia and the Pacific will build on the preparatory activities in the period 1991 to 1994 with a focus on the LDCs of the region, and on other regional programmes and projects. Partnership with the Economic and Social Commission for Asia and the Pacific (ESCAP) Regional Network for Agricultural Machinery will continue in networking, formulation, fund raising and implementation of regional and country-specific projects for the development and promotion of agro-related metalworking industries particularly in selected LDCs. Other areas of focus for cooperation with ESCAP, such as the Asian and Pacific Centre for Transfer of Technology and FADINAP (Fertilizer Advisory, Development and Information Network for Asia and the Pacific) will continue to be an important element of the programme. Integrated programme formulation with other agencies and development banks will be intensified in the region. Intercountry cooperation in agro-based industries and environmental issues, such as cleaner production technologies and effluent treatment in the leather tanning industry, as well as networking systems, such as continuation of activities in pesticides development and automotive emission control, will be pursued further, based on experience gained under ongoing programmes. In addition to ongoing technical cooperation activities at the country level, emphasis will be placed on programmes for the LDCs and other disadvantaged countries in the region in support of poverty alleviation strategies, including through small-scale industry development, drawing also on the experience acquired by the newly industrializing countries in the region. The increasing momentum of subregional cooperation in the Association of South-East Asian Nations, the South Asian Association for Regional Cooperation and the South Pacific Forum continues to be an important opportunity for the gradual integration of LDCs into those cooperation arrangements.

139. In the plan period, the Regional Cooperation Programme for the Industrial Recovery of Latin America and the Caribbean will continue its work in the priority areas initially identified under the Programme. Programmes and projects supporting Governments and institutions in industrial policy formulation and implementation will be developed, particularly on decentralization policies and mechanisms as well as on schemes assisting small and medium enterprises in upgrading human resources and in achieving environmentally sustainable production. Addressing groups of enterprises in specific subsectors of industry, UNIDO services will be oriented towards enhancing competitiveness through applying new forms of production and organizational systems based on integrated quality concepts, lean management, flexible specialization, waste minimization and information networking. At the same time, subcontracting relationships will be promoted toward achieving long-term cooperation involving increasing technological sophistication. Sectoral emphasis will be given to capital goods and agro-based industries as well as to biotechnology. At the regional and subregional level, the focus will be on networking of industrial support services and on market development programmes with particular attention to the needs of the Central American and Caribbean less developed countries.

140. The activities of UNIDO within the Europe programme will concentrate primarily on five integrated, generic programmes for individual or groups of countries that will cover: industrial restructuring at the enterprise level, including privatization and technological modernization; industrial investment promotion, including technology transfer; entrepreneurship and small and medium enterprise development, particularly strategic decision-making and financial analysis; environmental protection through the promotion of cleaner production and energy efficiency; and development of industries directly supporting basic needs, including building materials, hospital equipment and pharmaceuticals, and food and textile processing. These five programmes will be supplemented by more specialized programmes that will, inter alia, cover the reduction of greenhouse gas emissions and the building of industrial data systems. All programmes will cover subsectors within the domains of the agro-based, chemical, engineering and metallurgical industries as appropriate and will be derived from industrial subsector and policy analysis. Through designing regional industrial support strategies, a targeted response to the industrial needs and priorities of different groups of countries will be ensured.

D. Programme instruments

141. The above detailed description of the various services foreseen to be rendered by UNIDO in compliance with the development objectives and on the basis of the revealed demand from the Member States of the Organization might give the impression that UNIDO is covering too wide a range of activities with the danger of spreading its resources too thinly. It must, however, be emphasized that demand-driven programmes will necessarily need to comprise a multitude of disciplines and services corresponding to the diversification of the needs and priorities of the Member States. The services described in the present medium-term plan will, therefore, have to be understood as being the broad framework within which UNIDO will concentrate its actual resources for delivering specific services.

142. These endeavours of UNIDO to ensure an adequate focus and critical mass in utilizing its scarce resources will be pursued by the following measures. First, most services that UNIDO actually is and will be delivering comprise in themselves elements of various disciplines. This means that, e.g., a programme of rendering support to a small-scale industry in a developing country will be conceived and carried out as an interdivisional programme containing ingredients of some of the services outlined above such as analytical and policy advice, information, technical cooperation and the promotion of international cooperation. The various components will thus not constitute independent services but will be packaged into coherent programmes.

143. Secondly, UNIDO will pursue its endeavours outlined in the Director-General's Bulletin on Guidelines for the Management of UNIDO Services (UNIDO/DG/B.177) to screen requested services from the very outset regarding their compliance with a given country's priorities and the capabilities of UNIDO (see also para. 187 below) so as to ensure that the resources of the Organization are not stretched beyond a feasible limit.

144. Finally, it is foreseen that the larger number and increased functions of UNIDO country offices supported by national expertise of the host country will have to be directly involved in both the design and delivery of services by the Organization.

145. All in all, a major challenge for UNIDO in the plan period will be (a) to tie the range of requested services to the five development objectives; (b) to screen, assess and select specific services as to their expected development impact and UNIDO capabilities; and (c) to build integrated programmes of services utilizing synergy effects and team efforts.

1. Programme development

146. The forward-looking development of programmes and, in this context, the identification of priorities and the selection among them is a critical precondition for designing and implementing coherent and interlinked services. With a view to overcoming previous shortcomings, UNIDO has reformulated and strengthened its programme development approach (IDB.13/9-PBC.10/11).

147. The new programming framework, which is being applied on a trial basis in the 1994-1995 biennium, should become fully operational in the plan period. An important new tool is the UNIDO country support strategies which will be supplemented by country programming briefs. The strategies derive from a policy dialogue (and related analyses) between UNIDO and a given country's Government and other relevant industrial actors and formulate the UNIDO response to the needs and demands of industrial development in terms of priority programmes and services. They are linked to and actually complement the overall United Nations system exercise of preparing country strategy notes. Essentially, the strategies will draw upon all relevant UNIDO programme instruments in an integrated manner, i.e. they will commit UNIDO's own resources - both from the regular budget and from programmable UNIDO-administered funds - and link them with other non-programmable resources. Committing the former to assessed priorities will serve as a basis for mobilizing the latter in the same areas.

148. In the plan period, based on an assessment of the experience gained in 1994-1995, UNIDO will refine the country support strategies approach and format and will, where appropriate, also prepare consolidated subregional support strategies.

149. In terms of developing integrated and thematic programmes of services, UNIDO has made significant conceptual advances and is clearly in a vanguard position among United Nations agencies. Integrated programmes are derived from extensive subsectoral analyses strongly involving also the private sector and put forward coherent packages of technical cooperation, promotional and information services as well as policy advice. Thematic programmes, within a more limited perspective, develop successful UNIDO services into a series of projects adapted to the specific circumstances prevailing in different countries. It is expected that two integrated development programmes - one on the wooden furniture industrial system and one on the local production of health sector inputs for the Africa region - as well as two thematic programmes - one on women entrepreneurs for growth and one on biomass energy generation - will become fully operational in the plan period. Further integrated and thematic programmes will be developed with special emphasis on areas in which industrial development can be effectively linked with overall socio-economic objectives.

2. Analytical studies and services

150. A number of functionally diversified study and research activities will be carried out with a view to strengthening the conceptual and analytical foundation on which the operational programmes of the Organization rest, generating assessed UNIDO positions on critical industrial development issues and providing analytical and policy advisory services upon request.

151. A first group of studies will address global techno-economic trends and assess their implications for industrialization patterns and industrial strategies and policies in different regions of the world. In this, the focus will be on issues which are likely to affect significantly the future development paths of the developing countries, such as the industrial impact of major technological innovations, the sustainability and replicability

of different industrial development approaches, the determinants of international resource flows, and the relevance of efficiency-equity trade-offs. The results of monitoring global economic and technological trends and assessing their implications for different developing regions will be issued in an annual analytical report.

152. Second, action-oriented research will be carried out with a view to providing direction to the implementation of specific UNIDO programmes in fields such as small and medium enterprises, human resource development, private sector development, and environment and energy. The same applies to industrial subsectors on which empirical research will be undertaken based on the Organization's statistical database. This action-oriented research will increasingly be integrated into the work of those organizational units directly in charge of implementing related programmes. As has been the case since 1992, such action-oriented studies will continue to be funded partly under the TSS-1 facility established by UNDP, under the successor arrangements for agency support costs.

153. Finally, a series of country-level Industrial Development Reviews will be undertaken, complemented by related in-depth industrial surveys, brief investment and industrial policy reviews and regional industrial overviews as required. These are closely linked to the programming of UNIDO services and will, for the countries covered, provide an analytical basis for the preparation of UNIDO country support strategies. Equally important is their use as promotional documentation in the context of the Organization's international cooperation efforts, above all investment promotion activities, and as a basis for informed policy dialogues on industrial restructuring initiatives. Emphasis will be placed on strengthening UNIDO's link with users in the private industrial business community and on enhancing UNIDO's role as a centre of excellence for country economic analyses of industrial trends and policy issues as required by Governments, investors, industrial executives, aid officials and others.

154. For all publications resulting from UNIDO research activities, a targeted dissemination to different groups of clients in member States will be ensured and cooperation with commercial publishers will be intensified where appropriate.

3. Technical cooperation project management

155. Technical cooperation projects are all projects, financed either under UNIDO-administered or other funds, which fall within any of the following five categories: (a) institution-building projects; (b) direct support projects; (c) direct training projects; (d) experimental projects; and (e) pilot projects. It is in the context of technical cooperation projects that the majority of the substantive services rendered by UNIDO are actually delivered. The nature and range of these services has been described above under each of the five development objectives. The present section thus focuses on some general dimensions of project management.

156. In order to provide the Organization with the required operational support, a series of functions are carried out related to project management. Project personnel management and procurement services are to ensure the timely identification, appointment and administration of all international and national staff and consultancy firms for UNIDO projects, as well as the efficient and smooth supply of the goods, materials and equipment necessary to ensure the full implementation of technical cooperation projects. Project management also includes administrative support to fellowships and other training programmes of UNIDO.

157. Recipient developing countries expect UNIDO to provide individual experts and consultancy firms of high professional calibre with excellent communication skills so as to ensure the maximum transfer of knowledge. In projects in which procurement is involved, the recipient countries expect UNIDO to provide the required equipment, goods and materials at the best quality available in the market, yet at the most competitive prices. This requires that UNIDO improve the composition of its rosters and strengthen its contacts with sources of recruitment and procurement in all regions, e.g. through national recruitment services, industrial and scientific institutions and industry and technical associations. International competition for high-quality expertise also calls for greater flexibility and responsiveness on the part of the Organization with regard to conditions of employment, fees payable and administrative support offered to experts. In the area of fellowships and other training programmes it is indispensable to keep an updated register of institutions in both developing and industrial countries offering training opportunities, including study tours and group training programmes, in line with the implementation requirements of UNIDO technical cooperation projects.

158. At project personnel level, it is expected in the plan period that the prevailing trend will continue towards an increasing number of international experts employed for short-term assignments in a wide variety of highly sophisticated and specialized technological and economic disciplines. In addition, the reliance on national professional project personnel, employed on average for longer periods than international experts, will increase. The same applies to consultancy firms, which will increasingly be needed for highly specialized subjects on a short-term basis.

159. The technical cooperation rosters for project personnel, consulting companies and institutions, equipment manufacturers and vendors, as well as the inventory of available training opportunities will be expanded with a view to accommodating the needs for specialized expertise and equipment in increasingly sophisticated technological and managerial disciplines. Electronic data-processing and office automation techniques will be made available and used to enhance the efficiency of the recruitment process as well as the procurement of contract services and equipment.

160. A coherent project management policy will be developed and applied to ensure that highly qualified experts, consultancy firms and institutions, equipment manufacturers and vendors as well as training institutions are kept in the front-line services of the Organization.

4. Information services

161. Information is an indispensable element for the process of industrial development. Through this programme instrument, UNIDO attempts to disseminate sets of information relevant to industrial development taking into account regional and country needs. Information can only achieve a positive impact if it is tailored to specific needs and utilized at the right moment. Thus speed and quality of information are two factors carefully considered. This programme instrument encompasses the collection, processing, analysis, monitoring and dissemination of information. Sets of information provided by UNIDO comprise technological information, industrial investment information, industrial statistics, as well as information on services provided by UNIDO.

162. With the recent installation of Internet (a world-wide network of communication networks - cf. IDB.12/7, annex I, para. 8) at UNIDO Headquarters, dissemination of information will be dramatically facilitated and accelerated. In the plan period, efforts will be devoted to interlink various beneficiaries of this programme instrument world-wide to enable them to obtain higher quality and more rapid information.

163. Through the INTIB mechanism, UNIDO assists countries in taking well-founded technological decisions. The Industrial Inquiry Service is used to transfer and disseminate information and to respond to specific inquiries received. Such inquiries are normally received directly from industrialists, government policy makers or indirectly through other United Nations organizations. There is a growing trend that queries are routed via the INTIB network of regional and national focal points that serve as intermediaries and play an important role in packaging information in appropriate form, both for local users and to feed into central databases. Currently there are over 80 national focal points established in various countries. In the plan period, substantial efforts will be made to improve the performance of these focal points also by interlinking them more closely with the work of UNIDO Country Directors and IPS offices.

164. In general, information is stored and disseminated in various forms such as databases, printouts, microfiches: Industrial Development Abstracts contain information on UNIDO technical cooperation activities, studies and reports, and proceedings of expert group meetings; the International Referral System directs entrepreneurs to external specialized sources of industrial and technological information to obtain responses to their inquiries; the technology supply database contains details of technology offers and requests collected at Techmart events; the Referral Database on Energy and the Environment (REED) contains information on institutions, projects, technologies, and other information concerning energy and environment; the Information Resource Management System is an integrated database system based on REED extended to information for sectors other than energy and environment; and Information Referral System (INRES) is a UNDP-developed database of training opportunities offered by institutions in the developing world. In the plan period, particular emphasis will be placed on addressing the information needs of small and medium enterprises, including information specially related to clean and energy-saving technologies.

165. In accordance with a decision by the United Nations Statistical Commission, the responsibility for collection and dissemination of industrial statistics is being transferred from the United Nations Statistical Office to UNIDO and the Organisation for Economic Cooperation and Development. Beginning in 1995, UNIDO will assume responsibility for industrial statistics of developing countries and transition economies (for all non-OECD countries). The UNIDO industrial database will be enlarged and publication of the Handbook of Industrial Statistics will become an annual rather than a biennial exercise. Information of this type represents an integral part of technical cooperation programmes and efforts to strengthen the capabilities of countries in the domain of industrial statistics and related policy information will be intensified in the plan period. The goal is to help countries develop more detailed and relevant types of statistics on industrial investment and finance, production capacities and productivity, as well as other parameters needed to assess changes in comparative advantage.

5. Promotion of industrial and technological development

166. Industrial promotion encompasses a wide range of activities designed to assist countries to identify and articulate their needs, increase their awareness of emerging industrial and technological trends, enhance the exchange of experience between countries and introduce new ideas and approaches related to technical cooperation and international industrial cooperation. This instrument comprises above all the promotion of industrial investment, industrial technology promotion and the promotion of other forms of international industrial cooperation. This section should thus be read in close conjunction with section II.B.5 above on the development objective "international cooperation in industrial investment and technology", which is complemented here by information on the main methods and tools employed by UNIDO in its promotional programmes.

167. Concerning investment promotion and technology transfer, the pre-investment analysis component ensures the quality of investment proposals by providing assistance to countries in the preparation and appraisal of industrial investment projects or by strengthening capabilities in the preparation of such projects at the institutional level. Software packages such as the UNIDO Computer Model for Feasibility Analysis and Reporting (COMFAR) and the Project Profile Screening and Pre-appraisal Information System (PROPSPIN) are important tools of this component. Investment projects are identified by UNIDO and its IPS network supported by the global Databank for Investment Promotion Programmes. Programmes such as country presentation tours and delegates' programmes are important elements that contribute to this promotional activity. In country presentation tours, representatives of recipient countries undertake a short promotional tour, usually in connection with a specific investment forum, to countries from which major investments are expected. In the delegates programme, delegates from developing countries are invited to IPS

offices to promote a portfolio of projects over a period of one or two years. Screened investment projects are promoted through various means including investment forums organized in recipient countries and other events such as "Investmarts".

168. Technology and Investment Enhancement Strategy (TIES) is a promotional instrument that succeeds the Technological Information Exchange System (old TIES) and will become fully operational in the plan period. Its main objective is to promote cooperation, dialogue and policy discussions at regional and international levels among technology and investment institutions of developing countries on issues pertaining to and influencing technology and investment flows. The new TIES will be enhanced to address the investment issue together with technology information exchange.

169. Other more general mechanisms used for industrial promotion purposes include expert group meetings, workshops, consultations and other meetings arranged by UNIDO under its regular budget resources. They will primarily be applied for elaborating possible responses, by the developing countries themselves and by UNIDO, to pressing industrial development constraints and for identifying related technical cooperation requirements. Policy and technical advice will both be provided through such meetings as well as through separate advisory services rendered by UNIDO Headquarters and field staff.

6. Training

170. This programme instrument is closely linked with the development objective "development of human resources for industry" and should thus be seen in conjunction with it. It not only aims at the transfer of skills, but also includes the promotion and development of innovation, research and development capacities as well as managerial capabilities. As the Organization evidently cannot directly train millions of people, this programme instrument addresses those areas where it can act most effectively as a catalyst and stimulator of action and change. These include: (a) policy makers at various levels in government; (b) trainers in a large variety of organizations, including governmental and private sector organizations; and (c) key personnel in industry-related institutions and industrial enterprises. The programme instrument also aims to intensify the preparation and dissemination of training kits and packages of training materials, methods, manuals, documentation and software on high priority topics, drawing on materials developed in specific technical cooperation projects or at UNIDO Headquarters.

171. Other activities related to this programme instrument focus on specific training courses, organized on a group or individual basis, for key personnel from developing countries. Group training courses, including both in-plant and policy-oriented programmes, will be organized in response to specific training needs that are shared by a number of developing countries. In addition to group training, individual fellowships and study tours will be organized to meet specific training needs that can be more effectively met on this basis. In the plan period, increased attention will be paid in both types of training programmes to follow-up activities so as to enhance the impact of the training received.

172. The plan period will see the intensification of efforts by UNIDO to mobilize the considerable private sector resources in developing countries for enterprise-level training. A key element will be the training of both trainers and managers in industry supported by appropriate institutional and policy environments and by the provision of quality training materials.

173. Finally, UNIDO will further strengthen this programme instrument in cooperation with industrial associations, chambers of commerce and industry as well as large industrial enterprises, inter alia, through networking so as to facilitate the exchange of staff, information and curricula and establish joint training activities specifically in areas of high potential for ECDC/TCDC.

E. Supporting activities

1. Field representation

174. A number of factors combine to call for a strengthening and reorientation of the field representation of UNIDO. Apart from the general decentralization move in the United Nations system, these include: the need to strengthen the programme development efforts of UNIDO within a continuous dialogue with country-level decision makers; the increasing heterogeneity of UNIDO's clientele implying more negotiation and coordination requirements; the need to increase awareness of both public and private entities of UNIDO capabilities and services; the attempt to reach out to the various regions within a country in response to political and economic decentralization trends; and the need to develop integrated service packages in close consultation with different counterparts. As a result, an enhanced field presence is required to support UNIDO Headquarters in identifying, formulating, delivering and monitoring the services to be provided by the Organization in the most efficient manner. At the same time, the functions of the field offices will be broadened to range from programming activities to direct advisory services and thereby serve the entire Organization rather than being confined to supporting only its technical cooperation activities.

175. Effective coordination between UNIDO Country Directors (UCDs) and Resident Coordinators remains essential. At the same time, UNIDO field staff will need the flexibility to interact effectively with donor agencies, governmental/private sector bodies and funding agencies in their countries of assignment, in order to develop and negotiate all aspects including funding of UNIDO programmes and services.

176. In the plan period, UNIDO will actively pursue the implementation of United Nations General Assembly resolution 47/199 on decentralization of some functions from Headquarters to the field offices. As a first step toward that aim, UNIDO will examine the possibility of "networking" its various field offices.

177. In line with the recommendation of General Assembly resolution 47/199 calling for fullest utilization of the available national expertise at the field level, UNIDO field offices will include in the future, at least one or two national professional officers who will have an intimate knowledge of the industry in their own country and will assist UCDs in development and delivery of specialized services to various clients.

Similarly, UNIDO will increasingly consider the appointment of National Directors for UNIDO field offices, wherever possible.

178. As requested by the Board at its eleventh session (decision IDB.11/Dec.29), UNIDO will increasingly undertake redeployment of Headquarters staff to field posts - including the temporary assignment of technical specialists - and assess the prospects of permanent transfer of Headquarters posts to the field as part of decentralization. Thus, UNIDO will make every effort not only to maintain the current level of field offices (40 under all sources of funds) but to increase this number to 50, which has been recommended by the policy-making organs of UNIDO as a desirable target.

179. In line with the recommendation in document IDB.11/7-PBC.9/9 on the UCD programme and subject to availability of financial resources, UNIDO will examine the possibilities of establishing three subregional offices on an experimental basis. If the concept is found feasible and if additional resources can be tapped, UNIDO will consider establishing further subregional offices.

180. The UNIDO field offices will continue to be financed from a variety of resources, including the Organization's regular and operational budgets, the UNDP sectoral support fund as well as various contributions from Member States. However, since the UNDP sectoral support might be discontinued at the end of 1996, UNIDO will increase its efforts to obtain the support of Member States for funding part of the UCD programme.

181. In order to ensure a coherent and coordinated performance of the field representation programme, UNIDO has established a steering committee that will advise the Secretariat on the decentralization policy, mobilization of extrabudgetary resources, selection and recruitment of UCDs and possibilities of establishing subregional offices including their size, location and staff requirements. The committee will also regularly follow up on the implementation of decisions and recommendations of UNIDO policy-making organs on the UNIDO field representation programme.

2. Financial resource mobilization

182. In order to provide technical cooperation programmes and projects as well as other services requested by Member States to develop their industrial sectors, UNIDO requires funds and resources to finance its activities. Since the Constitution of UNIDO does not permit more than 6 per cent of the regular budget to be used for financing technical cooperation activities, the Organization has to mobilize the required funds from extrabudgetary resources.

183. In the past, UNIDO technical cooperation services were provided mainly through execution of UNDP-funded industrial projects in developing countries. With the gradual introduction of national execution in UNDP-financed projects, the role of UNIDO as a "subcontractor" of UNDP projects has declined dramatically. Therefore, if UNIDO is to provide any significant volume and quality of services to developing countries, it has to develop and implement a successful fund mobilization strategy and strengthen its own funds mobilization capabilities.

184. To secure the interest of potential providers of financial resources and to respond to the needs of the developing countries, UNIDO will ensure that its services meet the quality standards set by the General Conference at its fourth session, namely relevance, cost-effectiveness and sustainability (cf. General Conference decision GC.4/Dec.11, para. (d)). Special attention will be given both to the quality of programme and service design and to the quality of implementation, monitoring and evaluation in order to ensure a sustainable impact of UNIDO services as well as the expected level of cost-efficiency and transparency.

185. Special efforts will be made to enhance the promotional and communication capabilities of UNIDO, in order to make the Organization better known in recipient and donor countries with a view to allowing an informed demand for its services on the one hand and generating the extrabudgetary resources needed for delivery of such services on the other. For that purpose, UNIDO will strengthen its partnership with key actors in the industrial sector such as chambers of commerce and industry, technology institutes, associations of industry, etc., in both recipient and donor countries. Through better public information, UNIDO will make every effort through intensive contacts with governmental information services, national and local information media, donor communications in developing countries, etc. to increase the awareness about UNIDO capabilities and services and to improve the public image of UNIDO both in donor and recipient countries.

186. The required funding for UNIDO services will have to be secured from various sources including current and potential donors. Since, however, funding sources differ in terms of their objectives, operational policy, resource potential and capabilities, it will be essential for UNIDO to design and promote a tailor-made funds-mobilization strategy according to the profile of the present and potential providers of resources. The funding sources have accordingly been organized in terms of target groups rather than funding mechanisms and comprise funds from the United Nations system, Governments, development finance institutions and the industrial sector.

3. Quality assurance

187. As part of the restructuring of the Organization, the quality assurance system has been revised and broadened with a view to ensuring that agreed quality standards are consistently applied in the development and delivery of services. Quality assurance will be the direct responsibility of all staff formulating project documents and their supervising managers. Related advice is available directly in the various implementing Divisions through specially trained quality assurance officers while a central Quality Assurance Unit ensures the adoption of uniform procedures and methodologies. The new approach is thus based on building up and promoting quality consciousness from below and in an integrated and decentralized manner throughout the Organization. The quality standards applied will be regularly reviewed so as to ensure that they fully reflect the constitutional principles of the Organization, its strategies and policies as well as the relevant guidelines on procedures, methods and formats. In a broader perspective, new guidelines for the management of UNIDO services (PBC.10/11-IDB.13/9)

are being introduced that ensure that the entire process is transparent, relevant documentation is traceable and responsibility and accountability is clearly assigned at each stage. Also, a new screening mechanism has been put into place that will allow focusing the services of UNIDO at an early stage on those areas that: (a) correspond to its mandate, policies and priorities; (b) respond to country needs and strategies; (c) are likely to be fundable; and (d) fall within areas of UNIDO expertise and staff availability.

188. In the plan period, the operation of the quality system will be continuously monitored by the central Quality Assurance Unit, which will also act as permanent adviser to PPRC. Based on this monitoring, the senior management of the Organization will regularly assess the status and adequacy of the quality system in relation to the overall quality policy of UNIDO. This quality policy rests critically on the assumption that UNIDO, as a service organization, has to provide relevant, cost-efficient and sustainable support to the needs of client institutions - through supporting the analysis of a problem situation, the formulation of a programme for a client or its implementation.

189. Methodologies such as the project cycle management/objectives-oriented project planning enable the operation of the quality system to be done in a transparent, iterative and participatory manner involving to the extent possible both the client and the beneficiaries. In this way, relevance and long-term sustainability of the impact at the beneficiaries' level can be ensured. These methodologies are sufficiently open and flexible to be combined with other tools. In the plan period, UNIDO will continuously review these methodologies and harmonize them with those of other multi- and bilateral cooperation agencies through regular meetings with their experts. Furthermore, whenever requested, UNIDO will continue to transfer such methodologies and related guidelines and procedures to Governments and institutions of developing countries engaged in coordinating technical cooperation activities.

190. Managers and staff will operate the quality system for UNIDO services according to the above standards and criteria. This implies that they will have to be fully conversant with the above principles, policies, priorities, procedures, methods and instruments. In the plan period, a series of training programmes will thus be devised at different levels on the relevant quality standards and criteria.

III. ACTION REQUIRED OF THE COMMITTEE

191. The Committee may wish to recommend to the Board the adoption of the following draft decision:

"The Industrial Development Board:

"(a) Recalls General Conference resolution GC.5/Res.1, in particular paragraph 1;

"(b) Takes note of the draft medium-term plan, 1996-2001, as contained in documents IDB.13/10-PBC.10/12 and Add.1, and recommends its approval to the General Conference;

"(c) Also recommends to the General Conference that it decide that, starting from the next medium-term plan period, the draft medium-term plan should be renamed medium-term programme framework and should cover a period of four years;

"(d) Approves a ceiling for the regular budget for the 1996-1997 biennium representing 1.9 per cent growth as compared with the 1994-1995 biennium."